

# WA Commingled Recycling Improvements Project

Preventing  
Contamination  
at the Curb, MRF  
and Mill

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DEPARTMENT OF  
**ECOLOGY**  
State of Washington



# Agreed To:

- ▶ Collaborate regionally to address reducing contamination in commingled recycling systems
- ▶ **Work in three regional groups**
  - SWRO, NWRO, and ERO+CRO+ID
- ▶ **Include all stakeholders**
  - MRFs, Local Governments, Haulers, End-Users
- ▶ Policy discussions may be held by local governments separately



# Workgroup Update:

## ▶ Central + Eastern Region

- Held a summit
- Worked on Issue Papers
- Disbanded June 2010

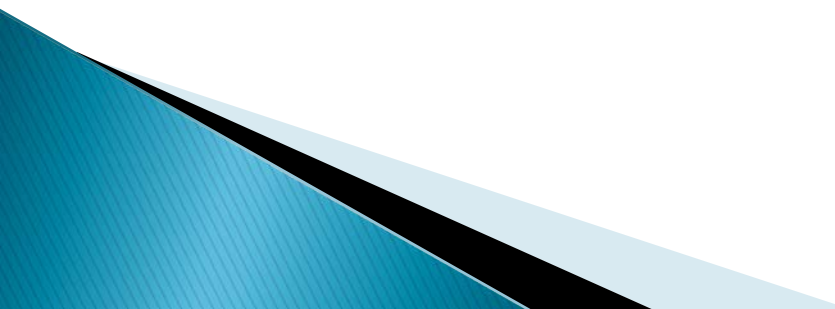
## ▶ Northwest Region

- Did not meet

## ▶ Southwest Region

- Phase 1 – Data gathering (1<sup>st</sup> year)
  - *Beyond the Curb* Report
- Phase 2 – Implementation (2<sup>nd</sup> year)
  - Expanded Membership
  - Consistency in programs – In progress

# Expanded Southwest Consistency

- ▶ Visual of Yes, No & Maybe list based on data in our report
  - ▶ Does the Workgroup support:
    - Yes, No & Maybe Lists as use as BMP
    - De-emphasize Materials Proposal
    - Add-in Materials Proposal
    - Remove Materials Proposal
    - Work on any of the remaining Key Issues
- 

# Yes ✓

Include in your commingled cart:



**Paper:** Newspaper (w/inserts), phone directories, non-refrigerated paper food boxes, printer and notebook paper, unwanted mail/catalogues, magazines, paper bags and corrugated boxes are all compatible with commingled collection and processing systems, and are wanted by local and export end-use markets either as news, mixed or corrugated grades.



**Plastics:** PET and HDPE bottles and jugs—8oz (?) or larger, clear, colored and natural—are all compatible with commingled collection and processing systems, are understood by the public, have good value, and are wanted by local and export end-use markets either as PET, HDPE, or mixed grades.

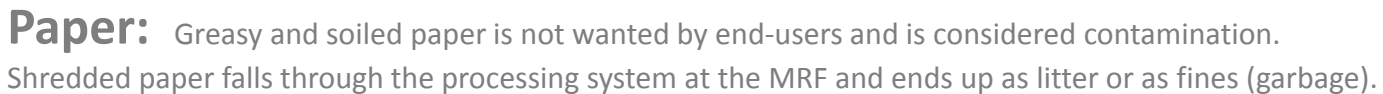
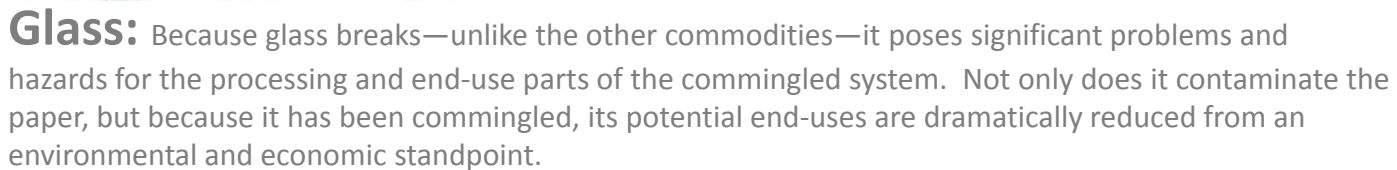


**Metals:** Steel cans, aluminum cans, and metal pots and pans are all compatible with commingled collection and processing systems, are understood by the public, have good to excellent value and are wanted by local end-use market as either used beverage container grade or scrap steel. Lids that are not firmly attached to a can are a safety issue for MRF staff, get stuck to the paper or lost in the fines and are not recovered.

Empty, dry, no lids, flatten if made of paper



**DO NOT** include in your commingled cart:



**Plastics:** Plastic film and bags cause significant problems for the processor as it wraps around machinery. Plastic drinking cups, trays and clamshells are easily flattened in the collection and processing system and end up mixed in with the paper and not recycled. Plastic caps and lids fall through the processing system and end up in the paper or the fines (garbage).

**Metal:** Aluminum foil, trays, and pet food cans are collected in such small amounts that they cannot reasonable be separated and end up as a contaminant in the paper.

**Take to a drop off location or put in your garbage**

# Maybe

Talk with your hauler, MRF and end-users to decide if these materials make sense to include in your commingled cart:



**Paper:** Paper products that held liquids or were intended to be refrigerated (polycoated, aseptic and wet strength) are designed not to break down in water. This property makes them undesirable at news and kraft mills where they are considered either a prohibitive or an outthrow. Yield losses of these materials when pulped are at or close to 100%. Paperback books have a high amount of adhesive, causing problems at paper mills and really should be reused rather than recycled for the fiber content.



**Plastics:** Non-bottle rigid plastic containers have domestic and strong export markets. It has a high value for the bulk since it is heavy as easier to sort than lighter, thinner plastic containers. However, as more plastics are included in the collection program, the public becomes confused and it can increase the non-program plastics by 30%, causing a strain on MRFs.



**Metals:** Aerosol cans can pose problems on the collection system if they are not empty, causing a mess (paint) or a hazard to the driver (pesticides). Steel scrap metal that is heavy or long can cause safety hazards for both the collection and processing system. It can also lead the consumer to think of the commingled recycling cart as having the ability to accept everything.

**Ask: Is this material getting recycled?**

# Proposal 1 – De-emphasize Materials

These materials would not be included in the Yes list, but would not officially be removed from the program:





# Proposal 2 – Add in Materials

**Plastics: Non-bottle rigid plastic containers** have domestic and strong export markets. It has a high value for the bulk since it is heavy as easier to sort than lighter, thinner plastic containers.



**Metals: Aerosol cans** can cause problems on the collection system if they are not empty; however, processors do not have any problems with them and they are of a high scrap value. **Metal pots and pans** are compatible with the collection and processing system, are easily understood by the public, and have a high scrap value.



# Proposal 3 – Remove Materials

**Glass:** Because glass breaks—unlike the other commodities—it poses significant problems and hazards for the processing and end-use parts of the commingled system. Not only does it contaminate the paper, but because it has been commingled, its potential end-uses are dramatically reduced from an environmental and economic standpoint.



**Plastics: Plastic film and bags** cause significant problems for the processor as it wraps around machinery. The resulting material, known as MRF film, is extremely dirty and has little value or use.

